

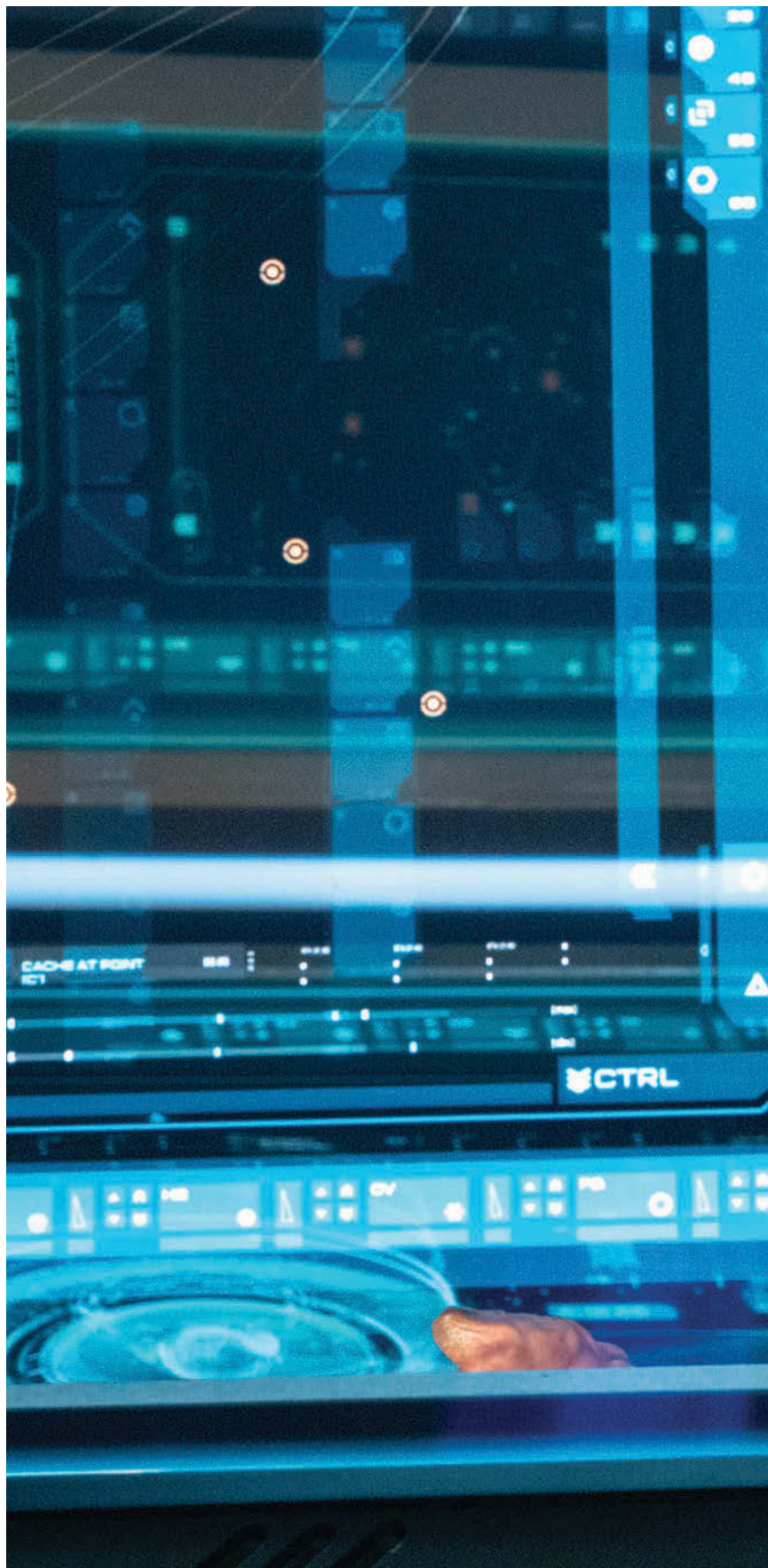
Outer Reaches

Star Trek: Discovery cinematographer Crescenzo Notarile, ASC, AIC makes his mark on an iconic universe.

By **Iain Marcks**

“I love exploring new worlds,” says cinematographer Crescenzo Notarile, ASC, AIC. “*Star Trek* is another world of cinematography for me. A brave new world. A world of celestial tapestries, dark limbos filled with alien planets, spaceships in the galaxy causing time warps and combustions of energies that even bring us onto different timelines.”

The spirit of *Star Trek* — in this case, *Star Trek: Discovery* on Paramount Plus — is “to boldly go.” And Crescenzo (who prefers to be known by his first name only, “like Madonna, like Sting”) is a good match — a bold spirit with decades of stylistically striking commercial, television and music video credits to his name. Crescenzo was asked to join the show for five episodes in its third season, after earning two ASC Award nominations and one Emmy nomination for his expressively bold work on the Fox series *Gotham*. He had worked with guest director Olatunde Osunsanmi on *Gotham*, who became a producer-director on *Star Trek: Discovery*. “We shared a mutual respect from the beginning,” says Crescenzo, who shared duties with series lead cinematographer Glen Keenan, CSC.





Previous pages: Avaah Blackwell as an Osnullus officer onboard the *USS Discovery*. This page: LED “light sticks” positioned on a console help illuminate the performers.



PHOTOS BY MICHAEL GIBSON, COURTESY OF CBS.

“I wanted to go further with color, lens flares, light and personal camera compositions.”

The pilot for *Discovery* was shot by Guillermo Navarro, ASC, AMC, in a style recalling the slick photography of the *Trek* reboot theatrical films photographed by Dan Mindel, ASC, BSC, SASC. The first two seasons of *Discovery* are set 10 years prior to the events of *Star Trek: The Original Series* (shot primarily by Gerald Perry Finnerman, ASC), and the third season rockets 900 years into the future. The show’s widescreen visual style, established by Navarro, is shot in 2.39:1 with Arri Alexa SXT cameras paired with Cooke Anamorphic /i SF lenses.

Says Crescenzo, “The show was already on its feet when I came in, and at first, confronted with an army of geniuses and ‘Trekkies’ — or ‘Trek-kers’ — I just wanted to make my days and survive my new language. I was taking my cues from [executive producer] Alex Kurtzman — the ‘Wizard of Oz’ of that franchise and my personal creative steering wheel — along with my cinematography partner, Glen; gaffer Heinz Gloss; key

“You’ve got to know when to go hard and when to back off. If it’s a more delicate, pensive or intimate scene, I’ll settle down to respect the words and the dramaturgy.”

grip Bob Daprato; chief camera assistant Andrew Stretch; [lighting] designer Franco Tata; and the consummately professional crewmembers, who were already there when I arrived, and were waiting for me to use creative courage to put my personal stamp on the show. I just didn’t want to rock the boat. I was blessed to have *Star Trek* actor-turned-director Jonathan Frakes as my first director; he nestled me into his heart and guided my spirit. It was an immediate kinship of many sorts.”

Crescenzo soon felt confident that he “wanted to go further with color, lens flares, light and personal camera compositions. A lot of the time we’re using in-camera effects: filters, prisms, probe lenses and shakers. I’ll use a piece of beveled glass in front of the lens and then flash the glass with a handheld Xenon flashlight.”

After extensive conversations, Ron Engvaldsen at Schneider Optics designed some specialty streak filters that allowed Crescenzo to change the color of his lens flares and control their effects. Prisms by Schneider and pieces of rummaged beveled glass were used in front of the lens to bend and distort the image during moments of intense drama or combat. “Sometimes I’d just get myself a colored gel, crinkle it up and tape it to the front of the beveled glass,” says the cinematographer. “But you’ve got to know when to go hard and when to back off. If it’s a more delicate, pensive or intimate scene, I’ll settle down to respect the words and the dramaturgy.”

Crescenzo’s camera floats and rolls through production designer Phillip Barker’s widescreen-friendly sets, an approach that conveys the feel of the *USS Discovery* moving through space. Says the cinematographer, “We always had an Alpha head on a Technocrane or on a Fisher dolly, and we sometimes used a Libra head as well, all to move and roll the camera. Otherwise, I would always be on Tangos or Dutch heads, so we could be spontaneously prepared to accentuate the geometry of the sets by dutching — giving us a subconscious feel of ‘Trekian’ style and flight.” When a ship rocks from being hit, Crescenzo used Clairmont Image Shakers from Keslow Camera, “to make it feel as physical as possible, like you were in the bowels of the ship being blasted.” Days on the *Discovery* bridge were heavy with Steadicam, high page counts and up to four cameras. “This became very compromising for proper lighting, but the scenes were very visceral, enough to take that onus away, objectively.”

The Cooke Anamorphic /i SF lenses were chosen for their flaring and bokeh qualities, which Crescenzo enhanced by placing pin sources of light in the background of shots “so the optic flares would dance and spark in a wonderful sort of impressionistic way.”

Crescenzo’s favorite lens was the 65mm macro for close focus, especially for close-ups of the cast, because it “rounds the face in a very

From top: Doug Jones as Saru; Oyin Oladejo as Lt. Joann Owosekun (left) and Emily Coutts as Lt. Keyla Detmer; Crescenzo takes command.



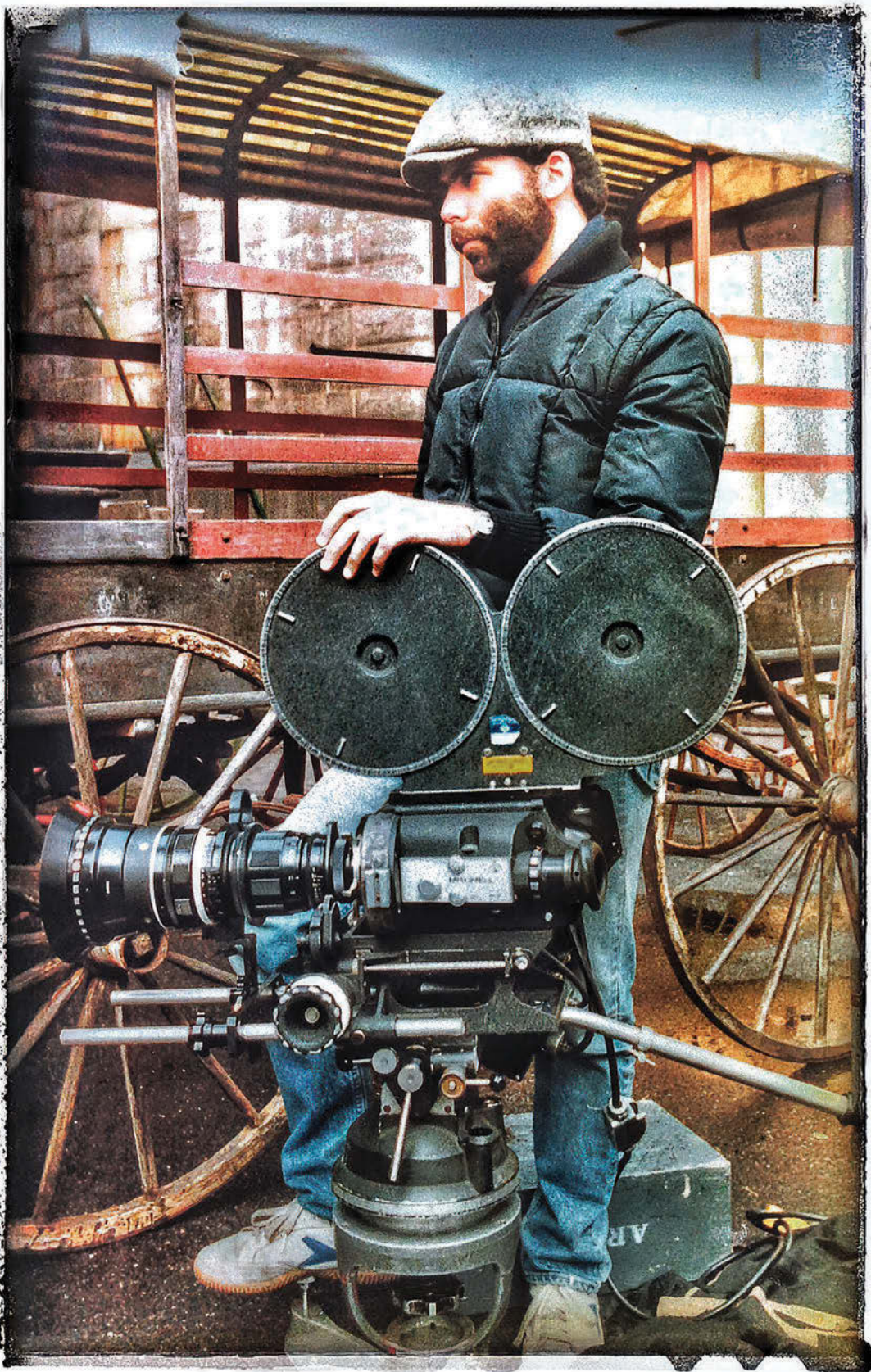
New Worlds

Crescenzo Notarile, ASC, AIC, was raised in Brooklyn, N.Y., by Italian immigrant parents who were artists; his father was a painter and a famed art director, and his mother was a sculptor and interior designer. After studying filmmaking at New York University and the New York Institute of Technology, where he earned a BFA, Crescenzo worked as a PA at his father's ad agency and then joined IATSE Local 644 to begin his career.

More than 40 years have passed since then, but Crescenzo points to some of his earliest professional credits as his favorite experiences. "They stand out because they still inspire a powerful emotional response in me," he says. "I was very impressionable, and I was experiencing new worlds. My eyes and creative heart were like a sponge."

Sergio Leone's *Once Upon a Time in America* (1984), shot by Tonino Delli Colli, AIC, was seminal both professionally and personally. "That's when I made my transition from camera assistant to camera operator, and being behind the lens on that film was a blessing," Crescenzo says. "Working with the Italian crew reconnected me to my Italian heritage, and I became very close with them. There was an undeniable 'sympatico.' We worked together many times after that, and as a result, I became an AIC member after I was sponsored by the legendary Dante Spinotti, ASC, AIC."

A few years later, Crescenzo found himself traveling the world on a private Lear jet to film Pink Floyd's *A Momentary Lapse of Reason* tour (1987-88) for director Larry Jordan. "We were bringing that art form to the highest level," says the cinematographer, who shot live performances, behind-the-scenes footage, and conceptual films that were sometimes rear-projected onstage. "A particular moment from the concert at the Palace of Versailles in France stands out: It was night, and I had 14 Panavision cameras rolling. Working handheld, I put myself onstage with Pink Floyd's lead man, surrounded by 360 degrees of light and lasers. When the group started playing 'Comfortably Numb,' I took my eye off the eyepiece to look out into the audience, take a



breath, and retain that image in my head like an eternal photograph. It was glorious and life-changing!”

Like many young cinematographers, Crescenzo found shooting music videos during MTV’s heyday creatively liberating. “You could explore and invent and not be afraid to make a mistake,” he says. The video for **Enigma’s “The Eyes of Truth”** (1994), directed by Julien Temple, took him to India and Nepal. “There I was, a boy from Brooklyn, riding an elephant in India and shooting a music video! We took a helicopter to the top of the Himalayas to shoot a scene. I looked out the window as we were landing and saw all these little kids running out of their huts in the blinding snow to greet us. During the shoot, I took Polaroids of the kids, and the expressions on their faces when they saw the photos were beyond words — they’d never seen themselves before from that perspective, because there are no mirrors up there.”

Crescenzo was among a team of cinematographers on the Michael Jackson project **Moonwalker** (1988), directed by Jerry Kramer; the others were Robert Collins and ASC members Tom Ackerman, Frederick Elmes and John Hora. “That’s the first time I really understood what the ‘It Factor’ was,” he recalls. “At one point,

I was shooting a close-up portrait of Michael with my 400mm lens while we were between takes, and as I looked through the lens, he was just standing there — motionless and unblinking — and I saw such sadness in his eyes that I was entranced. Then we called ‘Action,’ and he came alive as a different person, just like that.”

Another collaboration with Temple, the cult-classic crime drama **Bullet** (1996), also stands out for Crescenzo. “It was my first feature as a DP, and I learned the discipline of storytelling, screen continuity, pacing, and all stages of filmmaking from preproduction to post. It also taught me how to light actors hitting their marks — and to be prepared for actors not hitting their marks! Mostly the experience taught me that in photographing a story, you must be true to that story, setting aside your visual indulgences so they won’t distract from it. Most of all, I learned *fast* that without a cinematographer, you don’t have a film, no matter who’s acting in it or how great the script might be. You need visual execution, or you just don’t have a film.”

— Rachael K. Bosley



A-camera/Steadicam operator François Daignault frames actors David Ajala and Sonequa Martin-Green.

intimate and personal way, and strengthens the physiognomy,” he says. “T2.8 is the sweet spot. The background softens in an impressionistic way and produces a beautiful and tactile bokeh. The only time I’d increase my stop was if I was on a longer lens, shooting against a star-field backdrop. The pinpoint of star lights distort if they go out of focus, and you have to be very careful about this with anamorphic lenses, because the round stars or moons go oval in shape — not round — unlike how they would with spherical lenses.”

As lighting plays a significant role in realizing the science-fiction

elements of *Discovery*, the set incorporated as many as 5,000 DMX-controlled LED units. “My favorite light on this show is the Arri SkyPanel, because we can use it for almost anything,” says Crescenzo. “When the ship goes into alert mode, I can make them flicker, pulse and change color. For a close-up, I can use a SkyPanel S30 and a frame of Light Grid Cloth. If we needed fire or strobe lighting, it was quick to program on this unit — and I work very spontaneously, so this is a versatile tool for me!”

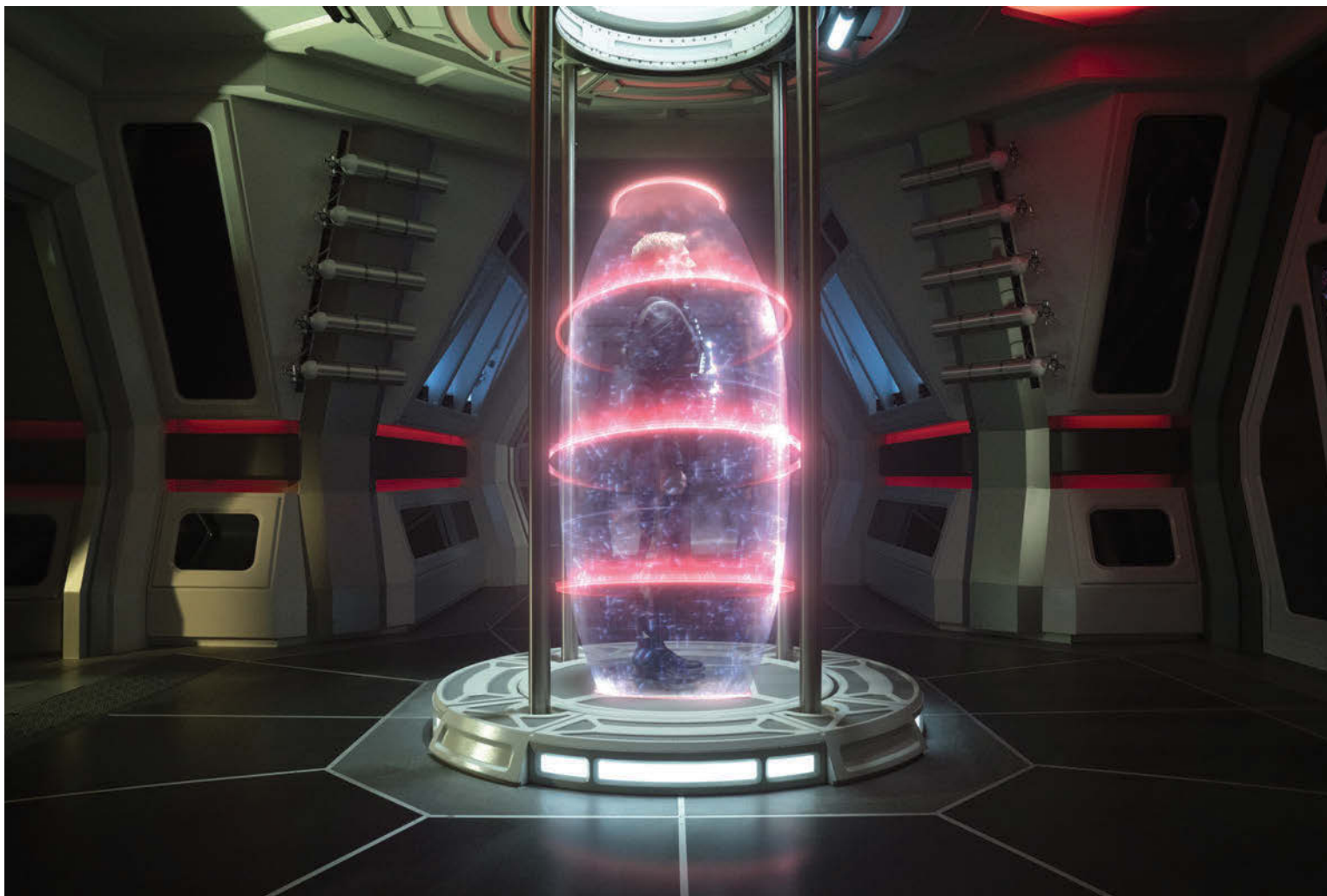
Particular to deep-space travel are the absence of day or night, and

Tech Specs:

2:39:1

Camera: Arri Alexa SXT

Lenses: Cooke Anamorphic /i SF



Top: Anthony Rapp as Lt. Stamets. Bottom, from left: *Star Trek* actor-turned-director Jonathan Frakes, actor Janet Kidder (in costume as Osyraa), Daignault and Crescenzo.

the difference in quality of light on a ship depending on its orientation in space. Crescenzo spotted T12s and 20Ks, along with occasional tungsten beam projectors gelled with CTS, through the *Discovery* Ready Room windows to produce strong, directional shafts of warm starlight. Windows on the dark side of the ship received soft, cool light from SkyPanel S120s and S60s, or reflected T12 Fresnels gelled cyan with $\frac{3}{4}$ CTB and $\frac{1}{2}$ Plus Green. A thin layer of “special-effect smoke haze shaped the hard beams graphically,” Crescenzo says, and further softened the glowing light.

Discovery makes use of extensive prosthetic makeup to depict strange alien beings from the far corners of the galaxy. One of these — Doug Jones’ Saru — captains the *Discovery* and occupies a significant amount of screen time in Season 3. The actor’s entire face is covered with thick, grooved, sculptural skin. Lighting Saru was a challenge because of the dimensionality of his face,” Crescenzo says. “If I light from the side, I can’t see his eyes with all the prosthetic layers around them, [so instead]

“You have to light the faces beautifully, even though some are meant to be menacing.”



Saru and Emperor Georgiou (Michelle Yeoh) in the “Mirror Universe.”

I’ll bring the light more to the front, lowering the angle and softening it, using a small S30 SkyPanel, double spaced and diffused with an opal frame, and with ¼ Grid Cloth to reduce the contrast. Soft light reaches more into the shadows of the prosthetics, thus giving a better tonal range of values to appreciate the prosthetics. Sometimes, I would run in at the last minute while the camera was rolling and hand-hold an LED ‘stick light’ just under the camera lens, to add twinkle to his green-contacted eyes and bring out the soul of his character.”

Season 3 also sees the return of the green-skinned Orion race. Crescenzo approached lighting Janet Kidder’s character, Osyraa, as he would a fashion model — from the front and overexposed — so that her emerald complexion would appear to glow and blow out the imperfections of the prosthetics. Eyclight for all of the actors’ close-ups came from custom 1’ and 2’ sticks of LiteRibbon LEDs in milk acrylic, held above or below the camera’s matte box. “You have to light the faces beautifully, even though some are meant to be menacing,” he says.

Crescenzo overexposed all of his work on *Star Trek: Discovery* — up to a full stop, in some cases — with the intention of capturing extra shadow detail and pulling it down in the final color grade, “so the blacks become blacker and inkier and the pixels become tighter,” he says. He started with the default Arri K2S2 LUT and tweaked it from there, “while mostly shooting at an ISO of 800, splitting the latitude of highlights and shadows,” he says.

“My number-one tool in the online is the vignette,” says Crescenzo, who collaborated on the timing remotely with final-grade colorist Todd Bochner of Sim. “The dark edges from vignetting bring out the third dimension — the depth — and the center of the image comes toward you. I’ll try to shape the frame edges on set when I have the opportunity. But on an episodic schedule, with an abundant page count, I’m not going to take 15 extra minutes to set flags when I know I can do it in my final grade! Cinematographers should know their tools — not just on set, but also in postproduction.” ◉